

Abstract of the Disclosure

A dynamic services infrastructure accepts data describing data resources and stores that data in a relational database from which it may be retrieved to handle service requests issued by application programs. The database stores Service Definition data which is initially supplied in the form of XML Service Descriptor documents which are then mapped into the database from which they may be accessed. Each Service Definition includes an input specification which identifies the address of a resource as well as the nature of the input data to be supplied to the resource with the request, and further includes an output specification which describes the nature of the output information which is supplied by the resource in response to the request. The Service Definition further includes information describing the service provider which supplies the resource, test information including fixed input and output values which permit the operability of the resource to be verified, update information which permits the infrastructure to insure that the Service Definition information is kept current, and security information which permits the system to validate users and provide secure encrypted information exchanges. When a client sends a request for services to the infrastructure, obtains the service description for the desired resource from the database, transmits an output information request to the address specified in said the service description, supplying input information meeting the specification contained in said particular service description to said particular resource, and receives and routes output information provided by said particular resource in response to said output information request to the executing application program.